

# Electronic Healthcare Cards

An Expense Factor or a future Life-Saver in a Global  
World

**Prof. Dr. Juergen Seitz**

## Scenario

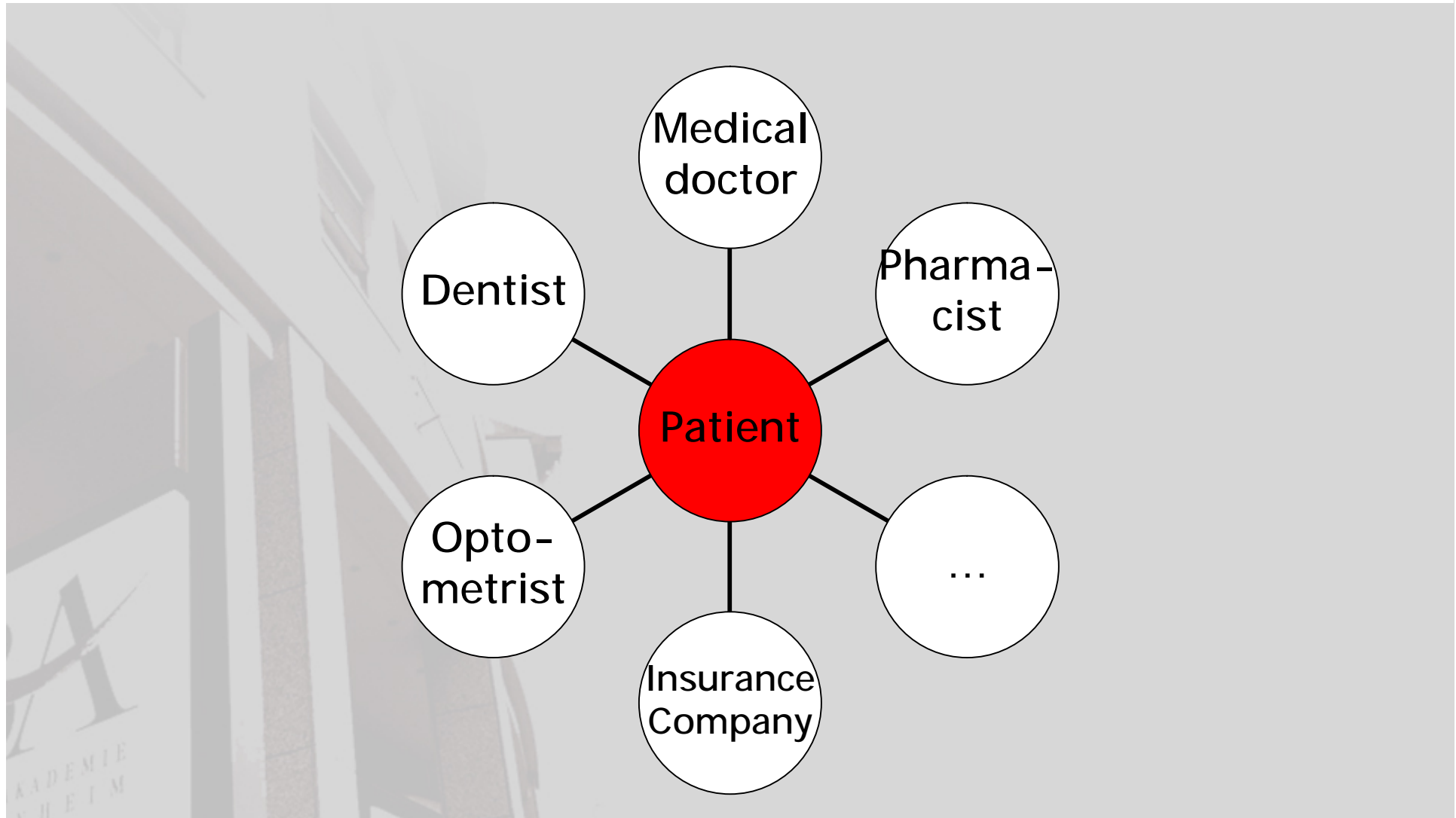
What happens to you if you get seriously sick,  
e. g., here in Wuhan?

## Electronic Healthcare Card (EHC)

### Personal data

- Ø Blood group
- Ø Prescribed medication
- Ø Allergies
- Ø Intolerances
- Ø ...

## Health Professional Card Holders



- Ø Health Professional Card for authentication and identification
- Ø Information Sharing
- Ø Passwords
- Ø Cryptography
- Ø Data Storage
  - § Electronic Healthcare Card
  - § Datacenter

## Involved parties

Largest project in Germany in the healthcare sector:

- Ø > 270 insurance companies
- Ø > 2,200 hospitals
- Ø > 20,000 pharmacies
- Ø > 195,000 medical doctors
- Ø > 80,000,000 insured persons

## Basic Elements of the Telematic Infrastructure

- Ø Application gateways to, e. g., systems of insurance companies
- Ø Network gateways for secure data communication
- Ø Infrastructure components, e. g., PKI
- Ø Peripheral devices to connect application systems from, e. g., medical doctors, hospitals, pharmacists
- Ø ...

## Budget

**1.6 billion Euro!**

(1,600,000,000 Euro)

## Only Expense Factor???

Germany:

Ø 800 million prescriptions per year

Ø Cost savings: 500 million Euro per year

United States:

Ø 7,000 people die because of illegible prescriptions p. a.

# World-wide system!!!

World-wide systems exist for financial transactions, flight carriers,...., but not for our most important good, our health!

Can we believe this in the 21st century?